

## **Work Element 400**

**November 2002**

### **Data Systems Development**

***PBC Work Element Manager – David Han***

OBJECTIVE: to define, develop, implement and evolve/enhance the requirements defined by NSSDC government staff relating to data storage, access and performance.

#### **SIGNIFICANT EVENTS:**

- Continued to support the operations staff with data ingest and archiving as needed.
- Maintained the DIONAS software suite and continued coding on enhancements to it.
- Continued planning of the system and processes to migrate NSSDC data to next generation of media.
- Coordinated with operations group for design and development of enhancements to DIONAS; coordinate software testing in an operational environment.
- Continued to interface with the Database Administrator about operational databases and next generation database designs.
- Continued to interface with NOST and coordinate the development of the next functional version of the NOST-supplied core software for DIONAS.
- Provided representation to the NSSDC Configuration Control Board.
- Delivered version 5.0 of DIONAS, which includes a modification to separate DIONAS job creation and job run functions.

## **Work Element 410**

**November 2002**

### **Data Systems Development**

***PBC Work Element Manager – David Han***

OBJECTIVE: to perform all the necessary, non-personal services required to manage contractor and sub-contractor staff supporting the Operations portion of the Space Science Data Operations Office (SSDOO). The contractor management team will meet with the NSSDC and SSDOO management staff to discuss significant events, updates, issues and concerns from the Operations Group. The Metrics Tracking System will be maintained current.

#### **SIGNIFICANT EVENTS:**

- Held Operations management staff meetings as needed.
- Held meetings with Operations staff as needed.
- Attended Government/Contractor meetings as scheduled.
- Provided representation to the NSSDC Configuration Control Board.
- Supported seamless rebadging of staff to subcontractors.
- Reported monthly PBC Metrics for October '02.

## **Work Element 421**

**November 2002**

### **NSSDC Data Ingest**

***PBC Work Element Manager – David Han***

OBJECTIVE: to ingest data into the NSSDC on-line, nearline and offline data archives.

#### **SIGNIFICANT EVENTS:**

- Continued to ingest IMAGE data, received 12 deliveries with a total of 429 files. All were ingested in a timely manner.
- Continued to ingest ISIS –1 data, received 3 deliveries with a total of 1612 files. All were ingested in a timely manner.
- Continued to receive and archive data on physical media, a total of 157 GB on 201 CDs and 4 magneto-optical disks from the Advanced Composition Experiment, Cluster 2, FAST, NEAR Shoemaker, and SAMPAX missions.
- Continued to advise the software development team with operational insights for design and development of enhancements to DIONAS; continued to support software testing in an operational environment.
- Continued to support the planning efforts for system and process design to migrate NSSDC data to the next generation of media.
- Continued data processing and ingest for the remaining data from NDADS, including Ulysses/URAP, Voyager, OSO-8 and Mariner 10.

## **Work Element 422**

**November 2002**

### **NSSDC Data Ingest**

***PBC Work Element Manager – David Han***

OBJECTIVE: to ensure that the data bundles entrusted to NSSDC are reliably findable, retrievable and usable into the indefinite future.

#### **SIGNIFICANT EVENTS:**

- Environmental monitors were checked each workday. The values recorded were out of compliance on 7 days. The PBC Work Element Manager was duly notified in a timely manner.
- Security was maintained and security procedures followed for the archive storage areas; there were no breaches.
- 9 boxes of tapes were recalled from off-site facilities at Iron Mountain and the Federal Records Center.
- Continued to advise the software development team with operational insights for design and development of enhancements of JIN; continued to support software.
- Continued to support the planning efforts for system and process design to migrate NSSDC data to the next generation of media.

## **Work Element 423**

**November 2002**

### **Request Coordination and Services**

***PBC Work Element Manager – David Han***

OBJECTIVE: to provide user support and request activities coordination for all data center services.

#### **SIGNIFICANT EVENTS:**

- The following user support was provided: e-mail referrals - 7; telephone - 5; faxes - 5; scientific assistance - 3; on-line support - 7; general user support - 26; general photo info - 14.
- A total of 129 shipments were made including 2 Federal Express shipments.
- We completed 78 requests for 139 Milky Way posters and 77 requests for 77 COBE posters. We've been out of envelopes since October and have only been able to ship out posters in tubes for the month of November. We are now out of tubes also.
- The last batch of email messages from the poster account were extracted in November. A message was added to the request form in October notifying requesters that we will not be taking any more orders for posters. We will fill the many orders we already have until all or most of the posters are gone.
- There were 30 MW posters and 1 COBE poster returned in November. The posters are returned for various reasons, mostly due to the recipient moving and not leaving a forwarding address.
- Assisted Dave Williams in his research of publications that have used NSSDC products in those publications. This research is for an article that will be in the NSSDC newsletter.
- Received two survey cards. One did not like that the ADC CD did not come with a nicely printed cover. Also said the case was "cheap". One person, who received the Welcome to the Planets CD complained that the "program is very difficult to run". Also circled that the staff was not helpful.

After a phone call to follow-up with the requester, it was determined that she had an old computer and she contacted JPL for help, not NSSDC. She is going to get a new computer for Christmas and she will try the CD again then. She will let us know what happens. She was very thankful for the follow-up phone call and said if she could, she would like to change the remark about the staff, knowing what she now knew.

- Staff members continue to inventory all of the NSSDC photo archive data for the eventual creation of an Oracle database of all analog data.

## **Work Element 430**

**November 2002**

### **NSSDC Data Ingest**

***PBC Work Element Manager – David Han***

OBJECTIVE: to provide comprehensive information functionality related to availability of data, to all launched spacecraft and to many spaceborne experiments.

#### **SIGNIFICANT EVENTS:**

- Maintained and updated the NSSDC Master Catalog.
- Maintained and updated JRAND.
- Maintained and updated JEDS and IDA.
- Maintained AIM and TRF and made 145 updates to them.
- No problem reports about the databases were received this period.
- Prepared and issued a SATX report.
- Prepared and issued SPACEWARN report in a timely manner.

## **Work Element 440**

**November 2002**

### **Computing Systems Operations**

***PBC Work Element Manager – David Han***

OBJECTIVE: to provide systems analysis and technical support to the operational computer activities of the NSSDC.

#### **SIGNIFICANT EVENTS:**

- Continued to maintain existing hardware (servers, Macs, PCs and peripherals) and system-level software – VMS, unix, Mac-OS, Windows, and other operational packages -- to ensure the optimal performance and connectivity. The average availability of systems for November 2002 was 99.99%.
- Continued to integrate new hardware and system-level software into existing systems to achieve upgraded capabilities and state-of-the-art facilities. Problems with installation of new disk will require software purchase for resolution.
- Maintained security of the systems to minimize security breaches. No security breaches were detected in this reporting period.
- Continued to administer specialized software such as data base and disk management systems.
- Continued to provide users with the necessary documentation, training, and assistance so that resources are fully utilized.